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SUITE B				ART UNIT	PAPER NUMBER
TIJERAS, N	M 87059			1733	-

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/018,250	SPEER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Jessica L. Rossi	1733			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on      This action is FINAL. 2b)⊠ This      Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4)  Claim(s) 31-60 is/are pending in the application 4a) Of the above claim(s) 47-60 is/are withdraw 5)  Claim(s) is/are allowed.  6)  Claim(s) 31-46 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/o	vn from consideration.				
Application Papers	•				
9)⊠ The specification is objected to by the Examine  10)□ The drawing(s) filed on is/are: a)□ acc  Applicant may not request that any objection to the  Replacement drawing sheet(s) including the correct  11)□ The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/8/02.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:				

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#### **DETAILED ACTION**

#### Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 31-46, drawn to a method of coating an optically readable data carrier.

**Group II**, claim(s) 47-56, drawn to an apparatus for coating an optically readable data carrier.

Group III, claim(s) 57-60, drawn to an optically readable data carrier.

2. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I and II have no common special technical feature because Group I claims applying a transparent adhesive film to a data carrier surface and subsequently applying a covering film to the adhesive film whereas Group II claims first and second laminating stations.

Groups I and III share a special technical feature relating to a transparent adhesive film and a covering film that cover a data-carrying surface. This common technical feature does not distinguish the claimed invention over the prior art because such is known, as taught by Takeda (EP 485366; refer to present office action for details).

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Group II and III have no common special technical feature because Group II claims first and second laminating stations whereas Group III claims a transparent adhesive film and a transparent covering film that cover a data-carrying surface.

Accordingly, unity of invention is lacking between Groups I-III and restriction is proper.

- 3. During a telephone conversation with Mr. Becker on 2/17/04 a provisional election was made with traverse to prosecute the invention of Group I, claims 31-46. Affirmation of this election must be made by applicant in replying to this Office action. Claims 47-60 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### Specification

5. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

## Specification/Claim Objections

6. The specification and present claim 33 are objected to because of the following informalities:

Regarding claim 33, it is noted that "PC" is never defined in the specification. It is suggested that Applicant insert -- (polycarbonate)-- after "PC" in line 22 on p. 2 of the

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specification. One skilled in the art at the time of filing would have readily appreciated that "PC" stands for polycarbonate and therefore the suggested amendment to the present specification would not raise a new matter issue.

Appropriate correction is required.

7. The specification is objected to because of the following informalities:

Page 13, line 16: "umP rovided on the adhesive film is the C tape 64" should be --um provided on the adhesive film is the PC tape 64--.

Appropriate correction is required.

8. Claim 45 is objected to because of the following informalities:

Regarding claim 45, "rotated synchronously to a relative movement" should be --rotated synchronously with a relative movement-- (see specification, p. 4, lines 15-17).

Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 34, it is unclear as to how the covering film can be withdrawn from a carrier film during application of the adhesive film to the data carrier surface when the covering film is applied to the adhesive film after the adhesive film is applied to the data carrier surface (note "subsequently" in claim 31)? Applicant is asked to clarify. It is suggested to remove the

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limitations pertaining to the covering film from claim 34 and add a new dependent claim regarding withdrawing the covering film from a carrier film after application of the adhesive film to the data carrier surface.

### Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Claims 31, 33, 36, 40, and 42-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeda (EP 485366; provided in IDS).

With respect to claim 31, Takeda is directed to a method of coating an optically readable data carrier (abstract). The references teaches two alternative embodiments depicted in Figures 10 and 11 where the order of the layers differs but the **process used to laminate the layers in each embodiment is the same** (reference refers to lamination process as "process (1)"). This lamination process comprises applying a transparent adhesive film 2 (p. 7, lines 48-50, p. 3, lines 25-30; skilled artisan would have appreciated a "film" can be a coating or a preformed layer wherein the adhesive of Takeda is at least a coating if not a preformed layer) to **at least one of the surfaces to be adhered** and subsequently stacking/laminating the surfaces (p. 7, lines 10-12 and 30-32 and 45-48). In Figure 10 the laminated "surfaces" are the data carrier surface 4 (p. 3, line 34 – p. 4, line 25) and support substrate 1 (p. 3, line 10), whereas in Figure 11 the laminated "surfaces" are transparent covering film 5 (p. 4, lines 31 and 37) and the data carrier surface 4.

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Therefore, since the laminates depicted in Figures 10 and 11 use the same lamination process, Figure 11 teaches applying transparent adhesive film 2 to the data carrier surface 4, applying transparent adhesive film 2 to the surface of the transparent covering film 5, and subsequently applying the transparent covering film 5 to the transparent adhesive film 2 located on the data carrier surface to stack/laminate the surfaces. It is noted that the present claim does not exclude adhesive being present on the surface of covering film 5 such that covering film 5 is applied to the adhesive located on the data carrier surface 4 via the adhesive located on covering film 5.

Regarding claim 33, Takeda teaches covering film 5 being a PC (polycarbonate) tape (p. 4, lines 37-39).

Regarding claim 36, Takeda teaches a shape and size of the covering film and adhesive film corresponding to the data carrier surface (p. 7, lines 13-14).

Regarding claim 40, Takeda teaches pressing the adhesive film and covering film against the data carrier surface via a rotating pressure roller (p. 7, lines 10-12).

Regarding claim 42, Takeda teaches the covering film 5 being held above the data carrier surface prior to bonding and therefore teaches the covering film being held at a pre-specified angle relative to the data carrier surface (Figure 10).

Regarding claim 43, the skilled artisan would have appreciated that either the pressure roller and/or the data carrier surface would have to be moving during this pressing operation; note 'relative movement' can be created by rotating the roller, the data carrier surface, or both.

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### Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 14. Claims 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. and further in view of Ozawa et al. (JP 6-293322).

Regarding claim 44, Applicant is directed to paragraph 12 above for a complete discussion of Takeda. Takeda is silent as to the data carrier surface moving linearly past the pressure roller. It would have been obvious to the skilled artisan at the time the invention was made to move the data carrier surface linearly past the pressure roller because linearly moving a substrate past a pressing roller is known in the laminating art, as taught by Ozawa (Figure 1; abstract; on-line translation), thereby allowing for continuous mass production wherein the data carrier can be transferred to multiple processing stations in an efficient manner.

Regarding claim 45, it would have been obvious to synchronize the rotation of the roller with movement of the data carrier surface because this would ensure that the roller performs its pressing operation when a data carrier surface is beneath it.

15. Claims 31, 33, 36, 40, and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. in view of Iida et al. (US 4961979).

\*It appears the present invention is directed to applying the covering film <u>directly</u> to the adhesive film located on the data carrier surface but the present claims are not limited to such. However, the following rejection is set forth to expedite prosecution.

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With respect to claim 31, Applicant is directed to paragraph 12 above for a complete discussion of Takeda. Once again the examiner points out that Takeda teaches applying transparent adhesive film 2 (p. 7, lines 48-50) to at least one of the surfaces to be adhered and then stacking the surfaces (p. 7, lines 10-12 and 30-32 and 45-48).

Therefore, with respect to the embodiment depicted in Figure 11, the skilled artisan would have appreciated that Takeda also teaches applying the adhesive film 2 to **only one** of the surfaces to be adhered. As to whether or not that surface belongs to the covering film 5 or the data carrier surface 4, such would have been within purview of the skilled artisan at the time the invention was made because only the expected lamination results would have been achieved regardless of which surface the adhesive is applied thereto; especially since Takeda teaches both surfaces being capable of receiving adhesive.

However, it would have been obvious to the skilled artisan to apply the adhesive film 2 to only the data carrier surface 4 such that the covering film 5 is directly applied to the adhesive film located on the data carrier surface because it is known in the art to apply an adhesive coating/film 22 to a data carrier surface 1 and subsequently apply a covering film 23 directly to the adhesive film, as taught by Iida (column 3, lines 56-60; column 7, lines 25-26 and 38-44).

Regarding claims 33, 36, 40, and 42-43 please refer to paragraph 12 above.

16. <u>Claims 32, 34-35, and 38-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. and Iida et al. as applied to claim 31 above, and further in view of Amo (US 6200402).</u>

Regarding claim 32, Takeda teaches the adhesive film being a variety of materials such as acrylic (p. 3, line 30) but is silent as to what form the adhesive is in. (please note Applicant's

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adhesive film is a pressure sensitive adhesive layer 25 that does not require a carrier material; however this adhesive layer 25 is sandwiched between a carrier film 26 and a release film 24 wherein the release film is peeled off, the adhesive is pressed onto a data carrier surface via a pressure roller 33, and the carrier film is removed during or after this pressing step - Figure 2, p. 6, lines 14-16, p. 7, lines 20-21)

It is known in the art to apply an adhesive film comprising a pressure sensitive adhesive layer S2 without carrier material (i.e. acrylic PSA; column 6, lines 46-50) by peeling a release film S3 from the adhesive layer and pressing the adhesive layer onto a data carrier surface D1 via a pressing roller 1 that moves relative to the data carrier surface wherein a carrier film S is removed from the adhesive layer after this pressing step, as taught by Amo (Figure 1; column 2, lines 50-62). Amo teaches such an adhesive film being an improvement over prior art adhesive films (i.e. film coatings, adhesive film layers applied by hand) because its application allows for the elimination of air bubbles between the adhesive and data carrier surface and hence uniform bonding between the two (column 1, line 58 – column 2, line 20; column 2, lines 37-41; column 10, lines 60-65).

Therefore, since Takeda teaches the adhesive can be acrylic and Amo teaches the adhesive film can be an acrylic PSA layer without carrier material, it would have been obvious to the skilled artisan at the time the invention was made to use an adhesive layer without carrier material for the adhesive film of Takeda because such is known in the art, as taught by Amo, wherein such a film can be applied via a pressing roller thereby eliminating air bubbles between the adhesive film and data carrier surface thereby producing a uniform bond between the two.

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Regarding claim 34, Amo teaches peeler 4 withdrawing the adhesive film S2 from a carrier film S after application of the adhesive film to the data carrier surface D1 (Figures 9-10; column 4, lines 48-51).

Regarding claim 35, Amo teaches withdrawing a protective film S3 from the adhesive film prior to application of the adhesive film (column 2, lines 50-62).

Regarding claims 38-39, Amo teaches applying the adhesive film to the data carrier surface in a centered manner by means of a centering shaft 3 wherein the shaft aligns the adhesive prior to the step of pressing the adhesive thereon (Figure 3; column 3, lines 42-43).

Regarding claim 40, Amo teaches applying the adhesive film by pressing it against the data carrier surface via a rotating pressure roller 1 (Figure 1; column 8, lines 20-25).

Regarding claim 41, Amo is silent as to controlling a pressure of the pressure roller 1. It would have been obvious to the skilled artisan at the time the invention was made to control the pressure applied by the roller because such is known in the laminating art for preventing possible damage caused by excessive pressing or for preventing production of an inferior product caused by inadequate pressing.

Regarding claim 42, Amo teaches the adhesive film being held at a pre-specified angle relative to the data carrier surface (column 3, lines 45-47; column 9, lines 45-50).

Regarding claim 43, Amo teaches the roller moving along the surface of the data carrier and therefore teaches the roller and data carrier surface being moved relative to each other (column 8, lines 30-39); note 'relative movement' can be created by rotating the roller, the data carrier surface, or both.

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Regarding claim 44, there is no indication when this movement occurs and the term 'linearly' interpreted broadly can indicate the substrate moves along a line, whether it be straight or curved. Therefore, since Amo teaches returning roller 1 to its starting position downstream of the rotary table T (Figures 6-9) after applying the adhesive film to the data carrier at station X located along a path of rotary table 2 and rotating table 2 clockwise to position the data carrier at station Y, the skilled artisan would have appreciated that the data carrier is moved 'linearly' along a curved line past roller 1 when moving from station X to station Y (Figure 14; column 12, lines 34-42).

Regarding claim 45, it would have been obvious to synchronize the rotation of the roller 1 with movement of the rotary table 2, and hence movement of the data carrier surface D1 located thereon, because this would ensure that the roller performs its pressing operation when a data carrier surface is present at adhesive applying station X.

Regarding claim 46, Amo teaches the adhesive layer being a pressure sensitive adhesive (column 6, lines 46-50).

17. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. and Iida et al. as applied to claim 31 above, and further in view of Amo and Deurer et al. (US 5891290).

Regarding claim 37, Takeda teaches the adhesive film and covering film corresponding to a shape and size of the data carrier surface (Figures 10-11; p. 7, lines 14-15) but is silent as to punching at least on of them onto a carrier film. Applicant is directed to the rejection of claim 32 set forth above in paragraph 16 for motivation to use the PSA layer of Amo for that of Takeda.

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It would have been obvious to the skilled artisan at the time the invention was made to place the adhesive film of Takeda in view of Amo onto the carrier film by punching sections cut out from a continuous film because such is known in the art, as taught by Deurer (teaches punching out sections 10 cut out from film 20 onto carrier film 21; see claim 1; column 3, lines 24-25), wherein this allows for direct transfer of the cut out portions onto the carrier film.

18. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al., Iida et al., and Amo et al. as applied to claim 43 above, and further in view of Ozawa et al.

\*It is noted that present invention is directed to 'linear movement' of the data carrier surface being in a straight line. Although the present claim language is not limited to such (linear movement can be along a line that is straight or curved), the following rejection is set forth to expedite prosecution.

Regarding claim 44, it would have been obvious to the skilled artisan at the time the invention was made to substitute the rotary table 2 of Amo with linear conveying means that moves the data carrier surface in a straight line past the pressing roller 1 because such is known in the laminating art, as taught by Ozawa, wherein this allows for simple, straight line progression of the process.

#### Double Patenting

19. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. Claims 31 and 33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 52 of copending Application No. 10/018,143 in view of Takeda et al.

With respect to claims 31 and 33, the copending application teaches all the limitations except applying the PC tape (covering film) to the adhesive film after the adhesive film is applied to the data carrier surface. Whether to apply the PC tape to the adhesive before or after its application to the data carrier surface would have been within purview of the skilled artisan because only the expected results would have been achieved. However, it would have been obvious to apply the PC tape after the adhesive is applied to the data carrier surface because such is known in the art, as taught by Takeda (see paragraph 12 above for complete discussion).

This is a provisional obviousness-type double patenting rejection.

21. Claims 31-46 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 37-50 and 53 of copending Application No. 10/018,143 in view of Takeda et al.

With respect to claim 31, the copending application teaches all the limitations except applying a covering film to the adhesive film after the adhesive is applied to the data carrier surface. It would have been obvious to apply a covering film to the adhesive film of the copending application after the adhesive is applied to the data carrier surface because such is

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known in the art, as taught by Takeda (refer to paragraph 12 above for complete discussion), wherein the covering film would protect the adhesive layer and data carrier surface.

Regarding claim 33, Takeda teaches the covering film being a PC tape (see paragraph 12 above).

Regarding claims 32 and 34-46, the copending application teaches all the limitations.

This is a <u>provisional</u> obviousness-type double patenting rejection.

22. Claims 31-46 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 32-40, 42, and 46-48 of copending Application No. 10/018,144 in view of Takeda et al.

With respect to claim 31, the claims of the copending application teach all the limitations except the first substrate being a data carrier surface, the adhesive film being transparent, and the second substrate being a covering film. It would have been obvious to the skilled artisan at the time the invention was made to have first substrate be a data carrier surface, the adhesive film be transparent, and the second substrate be a covering film because such is known in the art, as taught by Takeda (see paragraph 12 above for complete discussion), wherein a transparent adhesive allows laser to pass through it and read the data carrier surface while a covering film serves to protect both the adhesive and data carrier surface.

Regarding claim 33, Takeda teaches the covering film being a PC tape.

Regarding claims 32 and 34-46, the copending application teaches all the limitations.

This is a <u>provisional</u> obviousness-type double patenting rejection.

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#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jessica L. Rossi Patent Examiner Art Unit 1733